

said forward channels being spread with an associated spreading code that has, ideally, an orthogonal relationship to spreading codes of the other forward channels;

a receiver in each said SU for receiving the transmitted signal;

a despreader in each said SU for despreading the received signal using a spreading code associated with the second forward channel to obtain a first measure of received signal energy;

b1
said despreader further despreading the received signal using a null spreading code that is known not to be transmitted by the RBU to obtain a second measure of received signal energy, the null spreading code having, ideally, an orthogonal relationship to the spreading codes of the forward channels; and

control means in each said SU for adjusting a phase of the spreading code associated with the second forward channel based on the first and second measures of received signal energy.

6
21. A synchronous CDMA communications system as in claim 20, wherein the despreader, when obtaining the first measure of received signal energy, obtains a correlation peak, and when obtaining the second measure of received signal energy obtains a correlation null.

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22. A synchronous CDMA communications system as in claim 20, wherein said despreader in each said SU operates over a range of phase states.

8
23. A synchronous CDMA communications system as in claim 22, wherein said control means in each said SU is